

## Test – EMT-B – Paramedic – CO Oximetry

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**MULTIPLE CHOICE: Choose the one alternative that best completes the statement or answers the question.**

1) Which of the following gases is the leading cause of accidental poisonings in the U.S.?

- A) Nitrogen dioxide
- B) Carbon dioxide
- C) Carbon monoxide
- D) Nitrogen monoxide

2) Which of the following gases is colorless, odorless, and tasteless?

- A) Oxygen
- B) Carbon dioxide
- C) Nitrogen dioxide
- D) Carbon monoxide

3) Which of the following is the chemical symbol for carbon monoxide?

- A) CO
- B) O<sub>2</sub>
- C) H<sub>2</sub>O
- D) CO<sub>2</sub>

4) Which of the following is NOT a common household source of carbon monoxide?

- A) Wood-burning stove
- B) Electric heat
- C) Gas water heater
- D) Kerosene space heater

5) What colorless gas is created by the incomplete combustion of coal?

- A) Carbon dioxide
- B) Carbon monoxide
- C) Oxygen
- D) Sulfur dioxide

6) What symptom usually occurs first that may indicate that brain tissue is oxygen-deficient?

- A) Headache
- B) Blurred vision
- C) Ringing in the ears
- D) Loss of consciousness

7) Weakness, dizziness, and altered level of consciousness are all signs and symptoms of possible carbon monoxide poisoning. Which one of the following body systems would be affected if all these signs and symptoms are present?

- A) Cardiac
- B) Nervous
- C) Respiratory
- D) GI

8) You and your partner arrive at the scene of a known carbon monoxide poisoning. Your patient is a 22 year old male complaining of an intense headache, nausea, and weakness. He has vomited once. He has no chest pain or shortness of breath and has been removed from the hazardous atmosphere. What intervention should be completed immediately to ensure proper treatment of this patient?

- A) High-flow oxygen
- B) Baseline vital signs
- C) Pulse oximeter
- D) Oxygen at 4 liters per minute via nasal cannula

9) You and your partner arrive on the scene of a patient complaining of flu-like symptoms. She is complaining of a headache, nausea, and has vomited twice. Which sign may help you determine whether the patient has the flu or carbon monoxide poisoning?

- A) Chest pain
- B) Altered level of consciousness
- C) Fever
- D) Cyanosis

10) In order for a CO oximeter to accurately get a reading, you must ensure that:

- A) The light source of the oximeter is properly aligned to the middle of the nail bed
- B) No ambient light or bright light is interfering with the finger probe
- C) The patient has good blood flow (hands are not cold)
- D) All the above

11) If you get a high reading on the CO Oximeter, you should:

- A) Assume it is correct
- B) Disregard the reading and take off the CO Oximeter
- C) Verify the reading on at least 2 other fingers
- D) None of the above

12) Why can a pulse oximeter NOT differentiate between oxygen and carbon monoxide?

- A) A pulse oximeter only detects oxygen molecules
- B) A pulse oximeter detects only that a molecule is attached to hemoglobin, not what molecule is attached
- C) Carbon monoxide mimics oxygen
- D) None of these answers are correct

13) You and your partner arrive on the scene of a reported ill female. You find a 46 year old patient complaining of a headache and nausea. She has felt ill for the last two days but has felt better by lunchtime each day. Today she stayed home and has felt ill all day. You suspect carbon monoxide poisoning. What should you do next?

- A) Apply high-flow oxygen
- B) Obtain vital signs
- C) Call the gas company
- D) Remove yourselves and the patient from the house

14) What form of hemoglobin is produced when carbon monoxide and hemoglobin bind?

- A) Oxyhemoglobin
- B) Carbondioxidehemoglobin
- C) Carboxyhemoglobin
- D) Carbon monoxide and hemoglobin cannot bind

15) Carbon Monoxide is how many times more likely to bind to hemoglobin than that of oxygen?

- A) 10 times more likely
- B) 250 times more likely
- C) 50 times more likely
- D) None of the above

16) Which of the following order are the proper steps to take when providing BLS care to a patient with carbon monoxide poisoning:

- A) Remove the patient from the hazardous environment, administer high-flow oxygen, and transport to a hospital.
- B) Call the gas company, take the patient's vital signs, and advise them to follow up with his/her personal physician.
- C) Obtain vital signs, administer oxygen, and wait to clear the scene until the patient is better.
- D) Remove the patient from the hazardous environment, obtain vital signs, and tell the patient to contact the gas company before going back into the building.

## **Advanced EMT Test Questions (in addition to EMT-B questions):**

17) You have a patient that has an altered level of consciousness possibly as a result of carbon monoxide poisoning. You have administered high-flow oxygen, and have begun transporting to the hospital. The patient's vitals are: blood pressure 100/52, HR 120, and RR is 20 and slightly labored. SpO<sub>2</sub> is 97%. What would be your next treatment for this patient?

- A) Keep the oxygen in place and continue to take vital signs
- B) Start an IV using an isotonic solution
- C) Check the patient's blood sugar level
- D) None of the above

18) You are transporting a patient who has been severely burned in a fire. Your patient is unconscious with a blood pressure of 90/42, HR of 136, and RR at 6 times per minute with an SpO<sub>2</sub> of 88%. Her SpCO is 26%. An IV has been established and she is on high-flow oxygen at 15 lpm. You are approximately 15 minutes away from the hospital. What would be your next course of action?

- A) Keep her on high-flow oxygen and tell your partner to drive faster
- B) Prepare your intubation equipment in case she stops breathing
- C) Assist her ventilations with a bag-valve mask
- D) None of the above

## Paramedic Test questions (in addition to EMT-B and AEMT questions)

19) In addition to IV placement, high-flow oxygen, and vital signs what other ALS intervention should be done with any patient you suspect of having carbon monoxide toxicity?

- A) Cardiac monitor placement to identify any dysrhythmias
- B) Intubate the patient as he/she will eventually stop breathing
- C) Give the patient Valium to prevent any future seizures
- D) None of the above

20) You arrive on scene of a 35 year old male who left the car running in his garage while working on it. He is complaining of a slight headache, but states he should not have called and does not think he needs to go to the hospital. His vital signs are stable, but you get a reading of 15% SpCO confirmed on 3 different fingers. Your next course of action should be:

- A) Tell the patient to take some Tylenol for his headache and advise him on the dangers of leaving his car running in a garage
- B) Advise him high levels of carbon monoxide have accumulated in his body, and encourage him to go with you to the emergency room
- C) Have him sign a refusal form and go back in-service
- D) Place high-flow oxygen and stay with him until his SpCO levels drop, then have him sign a refusal form

## **Answer Sheet – EMT – Paramedic – CO Oximetry**

*(EMT questions 1-16, AEMT questions 1-18, Paramedic questions 1-20)*

- 1) C
- 2) B
- 3) A
- 4) B
- 5) B
- 6) A
- 7) B
- 8) A
- 9) C
- 10) D
- 11) C
- 12) B
- 13) D
- 14) C
- 15) B
- 16) A
- 17) C
- 18) C
- 19) A
- 20) B